

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-11 (Cancelled)

Claim 12 (Currently Amended): A method of distributing communications established by radio-communication terminals, within a geographic cell of a radio-communication network, said geographic cell being sub-divided into at least two geographic sectors, the improvement comprising:

synchronously rotating an orientation of ~~at least one~~ all of said at least two geographic sectors if

a total transmission rate of one of said at least two geographic sectors is greater than a predetermined total transmission rate, or

a number of links established in one of said at least two geographic sectors is greater than a predetermined number of links.

Claim 13 (Currently Amended): The method according to Claim 12, wherein said step of synchronously rotating comprises one of:

mechanically rotating at least one of a transmission antennae and a reception antennae associated with said ~~at least one of said~~ at least two geographic sectors; and

reconfiguring a beam of a smart antennae associated with said ~~at least one of said~~ at least two geographic sectors.

Claim 14 (Currently Amended): The method according to Claim 12, wherein said step of synchronously rotating comprises one of:

synchronously rotating only if a total transmission rate of ~~at least one~~another of said at least two geographic sectors is less than said predetermined total transmission rate; and

synchronously rotating only if a number of links established in ~~at least one~~another of said at least two geographic sectors is less than said predetermined number of links.

Claim 15 (Currently Amended): The method according to Claim 12, wherein said step of synchronously rotating comprises:

detecting one or more sectors having one of a total transmission rate greater than a predetermined total transmission rate and a number of established links greater than a predetermined number of links;

selecting one of the one or more sectors in accordance with a predetermined prioritization strategy;

identifying a sector adjacent to said selected sector in accordance with a predetermined selection strategy;

synchronously rotating an orientation of ~~a subset~~said all of said at least two sectors through a predetermined angle to rebalance a load between said selected sector and said identified sector and to create at least two re-oriented sectors; and

~~from said selected sector toward said identified adjacent sector so as to create one or more new sectors within said cell; and~~

~~detecting at least one of the one or more new~~

determining if any of the at least two re-oriented sectors satisfying ~~satisfy~~ at least one tracking criterion; and

repeating said step of synchronously rotating ~~an orientation of a subset if no new re-~~
oriented sector satisfies said at least one tracking criterion ~~has been detected during said step~~
~~of detecting at least one of the one or more new sectors, until a new sector is detected.~~

Claim 16 (Currently Amended): The method according to Claim 15, wherein
said predetermined prioritization strategy comprises selecting a sector for which at
least one of the total transmission rate and the number of established links is the greatest ,
said predetermined selection strategy comprises determining a sector adjacent to said
selected sector for which at least one of the total transmission rate and the number of
established links is the least, and

said at least one tracking criterion comprises one of

a total transmission rate of a ~~detected new~~re-oriented sector is greater than or
equal to a total transmission rate of said selected sector, and

a number of links established in ~~said detected new~~a re-oriented sector is
greater than or equal to a number of links established in said selected sector.

Claim 17 (Currently Amended): The method according to Claim 13, wherein, when
said cell is sub-divided into three sectors, said synchronous rotation step is not implemented
if two of said three sectors have at least one of an identical total transmission rate and an
identical number of established links.

Claim 18 (Currently Amended): The method according to Claim 12, wherein said
step of synchronously rotating comprises:

matching a sector rotation speed to a time for carrying out a transfer of communication from one sector to another.

Claim 19 (Currently Amended): A device for the distribution of communications established by radio-communication terminals, within a cell of a radio-communications network, comprising:

means for synchronously rotating an orientation of all sectors in said cell according to any one of steps of Claims 12-18.

Claim 20 (Currently Amended): A base station for a cell of a radio-communication network, comprising:

means for ~~distributing~~ rebalancing a communications load among sectors in a cell according to any one of the steps of Claims 12-18.

Claim 21 (New): A method of distributing communications established by radio-communication terminals, within a geographic cell of a radio-communication network, said geographic cell being sub-divided into at least two geographic sectors, the improvement comprising:

rotating an orientation of at least one of said at least two geographic sectors if

a total transmission rate of one of said at least two geographic sectors is greater than a predetermined total transmission rate, or

a number of links established in one of said at least two geographic sectors is greater than a predetermined number of links, wherein said step of rotating includes:

detecting one or more sectors having one of a total transmission rate greater than a predetermined total transmission rate and a number of established links greater than a predetermined number of links;

selecting one of the one or more sectors in accordance with a predetermined prioritization strategy;

identifying a sector adjacent to said selected sector in accordance with a predetermined selection strategy;

rotating an orientation of a subset of said at least two sectors through a predetermined angle from said selected sector toward said identified adjacent sector so as to create one or more new sectors within said cell; and

detecting at least one of the one or more new sectors satisfying at least one tracking criterion; and repeating said step of rotating an orientation of a subset if no new sector has been detected during said step of detecting at least one of the one or more new sectors, until a new sector is detected.

Claim 22 (New): A base station for a cell of a radio-communication network, comprising:

means for distributing communications among sectors in a cell according to the method of Claim 21.

Claim 23 (New): A method of distributing communications established by radio-communication terminals, within a geographic cell of a radio-communication network, said geographic cell being sub-divided into at least two geographic sectors, the improvement comprising:

mechanically rotating an orientation of at least one of said at least two geographic sectors if

a total transmission rate of one of said at least two geographic sectors is greater than a predetermined total transmission rate, or

a number of links established in one of said at least two geographic sectors is greater than a predetermined number of links.

Claim 24 (New): The method according to Claim 12, wherein said step of mechanically rotating comprises:

mechanically rotating at least one of a transmission antennae and a reception antennae associated with said at least one of said at least two geographic sectors.

Claim 25 (New): A base station for a cell of a radio-communication network, comprising:

means for distributing communications among sectors in a cell according any one of Claims 23-24.